REGIONAL ASSESSMENT OF OFFSHORE OIL AND GAS EXPLORATORY DRILLING EAST OF NEWFOUNDLAND AND LABRADOR
Technical Advisory Group (TAG) Session on *Cumulative Effects*
September 13, 2019
QUESTIONS AND ITEMS FOR DISCUSSION
PARTICIPANT INPUT FORM

Name and Affiliation: CAPP

1) Possible sources of cumulative effects

a) How should the inherently dynamic nature of the marine environment, including the continued influence of climate change and other such factors, be considered and addressed in the RA?

- Every EA has a section on "Effects of the Environment on the Project" which outlines how the design of the project factored in climate change. The mitigation/monitoring sections of the EA focus on measures to reduce or eliminate potential remaining climate change-related impacts of a project on climate-sensitive Valued Environmental Components (VECs).

b) What type and level of future exploratory drilling should be assumed in the Study Area for the purposes of the cumulative effects assessment, and how should this be defined and approached (e.g., possibly through definition of various "scenarios" of future activity levels / intensities / distributions upon which to base the assessment)?

- Given the REA scope and study area is virtually identical to the 2014 Eastern Newfoundland Strategic Environmental Assessment (SEA). It would be straightforward and transparent to refer to this latest effort as an update to the eastern NL SEA which identified key environmental features and considerations associated with future oil and gas activities in the eastern NL area (including Flemish Pass and parts of the Orphan Basin outside the 200 Nautical Mile Limit).
- A blow out or large oil spill is the 'worst case' potential pathway for environmental effects of exploration drilling. In the unlikely occurrence of such an event, spill modelling has shown that the released oil would travel eastward (i.e., off the eastern NL banks/basins towards the mid-Atlantic) and that shoreline oiling would be unlikely, and if it did occur, generally minimal (Ref. CEAA 2019). Our understanding is that the REA team does not intend to rely on the results of plume model simulations from previous EAs (as per the eastern NL SEA) or conduct new simulations at representative locations within the REA Study area as component of their scenario projections (as per the 2000 regional scale EA for exploration drilling off the Nova Scotia) .

c) What other types of human activities are affecting the marine environment in the Study Area, and are likely to have the most potential to result in cumulative effects in combination with offshore exploratory drilling?

- Commercial fisheries also operate in the deeper oceanic waters off NL and therefore would have the most relevance to offshore exploratory drilling.

- Reliance by the REA TAG on the C-NLOPB offshore license information map during consultation meetings can be misleading since exclusion zones around anchored (<2km) and dynamically-positioned (500m) drill rigs encompass relatively small ocean spaces over short time intervals (60-120 days).

2) Potential cumulative effects and their management

a) What factors and processes influence whether (and to what degree) the effects of individual projects and activities in the Study Area may overlap or otherwise interact to result in cumulative effects?

- Compared to some other mature offshore petroleum jurisdictions (e.g., Gulf of Mexico, North Sea), the NL offshore is less developed (and diverse) with regard to oil and gas exploration activities and developments and other ocean uses. As such, there is much less potential for direct or cumulative effects in the eastern NL area which was not effectively pointed out at this or other REA TAG sessions.

b) Are there particular environmental effects that are more likely than others to behave "cumulatively" in the Study Area? Are there certain environmental components that are more likely to be affected or are more sensitive to such cumulative effects?

- As for assessment of direct effects, the REA team should focus on most sensitive and therefore vulnerable elements of the ocean environment that is, at-risk species and special environmental areas.

c) Are there existing regulatory, planning or other mechanisms that help to ensure an adequate "degree of separation" between individual activities and their environmental effects in the Study Area?

- The scale and severity of potential environmental effects of exploration drilling must be put into proper context. The environmental 'footprint' of exploratory drilling from routine discharges and emissions is small (generally within the rig exclusion zone) based on the results of environmental effects monitoring (EEM) and research studies in the Atlantic offshore and internationally. Effects on biodiversity and abundance of marine life were detected most commonly within the 50 to 500 m range of drill sites for wells discharging Synthetic Based Mud (SBM) cuttings or Water Based Mud (WBM) cuttings and for multiple or single wells drilled at the same site. Studies have also shown a minor potential for taint, toxicity or health effects related to seafood consumption. Environmental effects of 'other' drilling-related discharges and emissions were considered minor because: released volumes were low (bilge, grey water, treated sewage, etc.), infrequent or of short duration (flaring), similar to other vessels (lighting), relatively small on a regional or global scale (air) or within the range of other sources in the marine environment (underwater noise). With respect to the latter, EEM field studies have shown that noise from drilling operations is largely masked by stand-by/supply vessels servicing the drill rig. Offshore petroleum EEM information pertaining to the NL offshore can be found on the C-NLOPB website at https://www.cnlopb.ca/environment/projects/.

d) What recommendations could the Committee consider making in its report around how cumulative effects might be better managed through existing, enhanced or potentially new regulatory and planning processes?

- The REA TAG should be relying on existing Geographical Information Systems (GIS) that Fisheries & Oceans Canada (i.e., fish & fisheries, environmentally sensitive areas, other ocean uses) and other government agencies such as Environment Canada (i.e., seabird distributions, oil slick sightings) maintain as the primary sources of environmental baseline information for the offshore NL area. There is no need to re-invent these GIS databases which other government agencies regularly update (e.g., up to 2017 in the case of fisheries data by DFO). Standard graphical outputs (some public; others available upon request from aforementioned agencies) from these databases readily allow for the overlay of potential exploration drilling 'footprints' (as an example refer to the SEA for the SW Scotian Slope).

- **Do you have any other input or recommendations that you would like to provide to the Committee on this topic?**

- For transparency and validity, the REA team should invite CAPP, commercial and indigenous fisheries interests (and other relevant stakeholders and relevant subject matter experts) to participate on the cumulative effects (and direct effects) assessment risk-ranking.

All comments received will be considered public and may be posted to the Canadian Impact Assessment Registry. For more information on the Canadian Impact Assessment Registry Terms of Use and Submission Policy, please consult https://iaac-aeic.gc.ca/050/evaluations/introduction?culture=en-CA#innovation . For more information on the Agency's privacy policies, consult the Privacy Notice on its website: https://iaac-aeic.gc.ca/050/evaluations/Protection?culture=en-CA